

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:  
Philipp Stoessel et al.

Application No.: 10/509,920

Confirmation No.: 2249

Filed: October 4, 2004

Art Unit: 1794

For: RHODIUM AND IRIIDIUM COMPLEXES

Examiner: M. H. Wilson

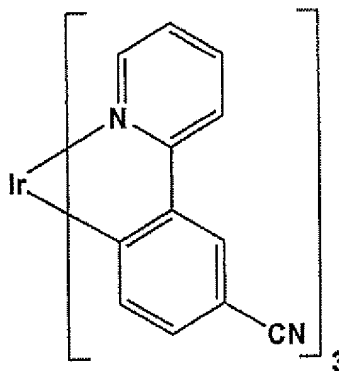
DECLARATION UNDER 37 C.F.R. § 1.131

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

We, Philipp Stoessel, Ingrid Bach, Hubert Spreitzer, and Heinrich Becker, declare as follows:

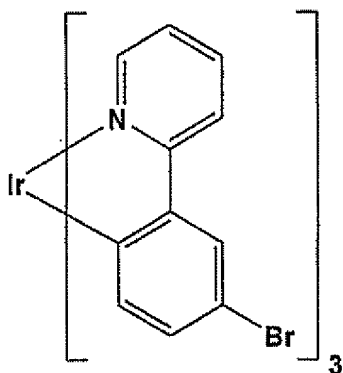
1. We are the inventors named on the above-captioned patent application.
2. On a date prior to November 6, 2002, the filing date of U.S. Patent No. 6,916,554 B2 to Ma et al., the following compound:



(hereinafter, "Ir(5CN-2PhPy)<sub>3</sub>") was reduced to practice in Germany, a WTO country, by a laboratory assistant working under the direction of Philipp Stoessel.

3. Attached are true and correct copies of (1) pages from a laboratory notebook of a laboratory assistant working under the direction of Philipp Stoessel (hereinafter referred to as "Exhibit A") and (2)  $^1\text{H}$  NMR spectra (hereinafter referred to as "Exhibit B"). Exhibits A and B establish the reduction to practice of  $\text{Ir}(\text{5CN-2PhPy})_3$  prior to November 6, 2002. The dates on the notebook pages of Exhibit A have been redacted.

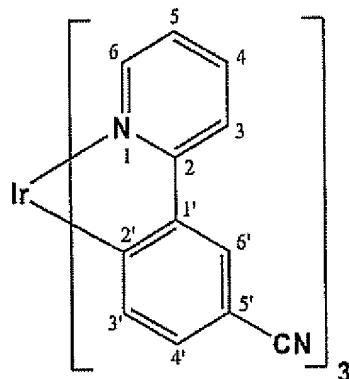
4. As demonstrated by the first page of Exhibit A,  $\text{Ir}(\text{5CN-2PhPy})_3$  was prepared on a date prior to November 6, 2002 by reacting 1 mmol of the following compound:



(hereinafter, " $\text{Ir}(\text{5Br-2PhPy})_3$ ") with 6 mmol of  $\text{CuCN}$  in 15 mL of degasified NMP (N-methylpyrrolidone) at  $145^\circ\text{C}$  with stirring. After 20 hours under these conditions, approximately 85 % of the  $\text{Ir}(\text{5Br-2PhPy})_3$  was converted to  $\text{Ir}(\text{5CN-2PhPy})_3$ , as determined by  $^1\text{H}$  NMR.

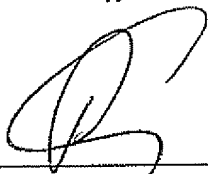
5. As demonstrated by the second page of Exhibit A, on a date prior to November 6, 2002 the reaction mixture produced by the reaction recorded on page 1 of Exhibit A was placed in a  $50^\circ\text{C}$  solution consisting of 2.5 g of  $\text{NaCN}$  in 50 mL of water and 50 mL of ethanol and stirred for 2 hours. A solid precipitated and was isolated and washed (1) three times with 30 mL of a solution of 600 mg of  $\text{NaCN}$  in 50 mL of water and 50 mL of ethanol, (2) three times with 30 mL of ethanol and water (1:1), and (3) three times with 30 mL of ethanol, and then dried. This reaction resulted in approximately 100 % yield of  $\text{Ir}(\text{5CN-2PhPy})_3$ , as determined by  $^1\text{H}$  NMR.

6. As demonstrated by pages 1 and 2 of Exhibit B, the  $^1\text{H}$  NMR spectrum of the  $\text{Ir}(\text{5CN-2PhPy})_3$  produced by the reactions recorded on pages 1 and 2 of Exhibit A confirms its structure. The  $^1\text{H}$  NMR peaks on page 2 of Exhibit B can be assigned to the  $\text{Ir}(\text{5CN-2PhPy})_3$  protons as follows:



Position	Approximate ppm
3	6.7
4	7.1
5	7.3
6	7.5
3'	7.95
4'	8.3
6'	8.4

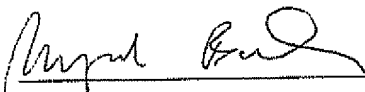
7. As demonstrated by the third page of Exhibit A, the preparation of  $\text{Ir}(\text{5CN-2PhPy})_3$  according to the procedure on page 1 of Exhibit A was subsequently repeated on a date prior to November 6, 2002.
8. The above facts establish that  $\text{Ir}(\text{5CN-2PhPy})_3$  was reduced to practice by a laboratory assistant working under the direction of Philipp Stoessel in Germany prior to November 6, 2002.
9. We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.



Philipp Stoessel

15.04.09

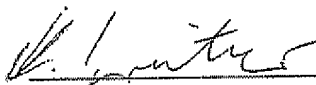
Date



Ingrid Bach

15.04.09

Date



Hubert Spreitzer

16/4/09

Date



Heinrich Becker

15.4.09

Date